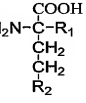
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled) An anti-mycobacterial composition comprising a mycobacterial glutamine synthetase (MbGS) inhibitor of Formula 1:

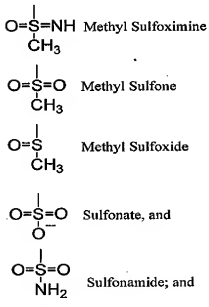


Formula 1

wherein:

R_1 = branched and straight-chain alkyl groups of 1 to 8 carbons, and

R_2 = tetrahedral group selected from the group consiting of:



wherein if R_2 is phosphonate, R_1 is not methyl; if R_2 is phosphinate, R_1 is not methyl and if R_2 is methyl sulfoximine, R_1 is not methyl or ethyl.

2. (Canceled) The anti-mycobacterial composition according to claim 1 wherein said R_1 is branched and straight-chained alkyl groups of from two to four carbons.

3. (Canceled)

4. (Canceled)

5. (Currently Amended) A method for treating, palliating or inhibiting mycobacterial infections in a mammal comprising:

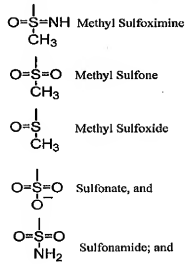
administering to a mammal having a mycobacterial infection an anti-microbial effective amount of an anti-mycobacterial composition comprising a mycobacterial glutamine synthetase (MbGS) inhibitor of Formula 1[[:]]; and

Formula 1

wherein:

R_1 = branched and straight-chain alkyl groups of 1 to 8 carbons, and

R_2 = tetrahedral group selected from the group consiting of:



inhibiting the growth of a Mycobacteria species;

wherein said composition effectively inhibits mycobacterial glutamine synthetase (MbGS), but does not substantially interfere with mammalian glutamine synthetase (MGS) *in vivo* in an anti-mycobacterial effective amount such that said mycobacterial infection is treated, palliated or inhibited.

6. (Canceled)

7. (Previously Presented) The method for treating mycobacterial infections in a mammal according to claim 5 wherein R_2 comprises branched and straight-chained alkyl groups from 2 to 4 carbons.

8. (Canceled)

9 (Canceled)

10. (Currently Amended) A method for treating, palliating or inhibiting mycobacterial infections in a mammal comprising:

administering to a mammal having a mycobacterial infection an anti-microbial effective amount of an anti-mycobacterial composition comprising alpha-methyl-L-methionine-S-sulfoximine or alpha-ethyl-L-methionine-S-sulfoximine; and

inhibiting the growth of a Mycobacteria species;

wherein said anti-mycobacterial composition effectively inhibits MbGS but does not substantially inhibit mammalian glutamine synthetase (MGS) in vivo at an anti-mycobacterial effective amount.

11. (Original) The method according to claim 5 further comprising co-administering an anti-microbial effective amount of isoniazid (INH).

12. (Currently Amended) The method for treating, palliating or inhibiting mycobacterial infections in a mammal according to ~~any one~~ either of claims 5 ~~to 11~~ and 10 wherein said mammal is selected from the group consisting of humans, monkeys, cows, pigs, horses, rabbits, rodents, cats and dogs.

13. (Currently Amended) The method for treating, palliating or inhibiting mycobacterial infections in a mammal according to ~~any one~~ either of claims 5 ~~to 11~~ and 10 wherein said mycobacterial infection is caused by a member of the genus

Mycobacterium selected from the group consisting of M. tuberculosis, M. bovis, M. avium.

14. (Canceled) A method for treating, palliating or inhibiting mycobacterial infections in a mammal comprising:

co-administrating an anti-mycobacterial effective amount of L-methionine-SR-sulfoximine (MSO) and ascorbic acid.

15. (Currently Amended) A method for treating, palliating or inhibiting mycobacterial infections in a mammal comprising:

administering to a mammal having a mycobacterial infection an anti-microbial effective amount of an anti-mycobacterial composition comprising alpha-methyl-D, L-methionine-SR-sulfoximine (α-Me-MSO) or alpha-ethyl-D,L-methionine-SR-sulfoximine (α-Et-MSO); and

inhibiting the growth of a Mycobacteria species;

wherein said anti-mycobacterial composition effectively inhibits MbGS but does not substantially inhibit mammalian glutamine synthetase (MGS) *in vivo* at an anti-mycobacterial effective amount.

16. (Previously Presented) The method according to claim 15 wherein said anti-mycobacterial composition is alpha-methyl-L-methionine-SR-sulfoximine or alpha-ethyl-L-methionine-SR-sulfoximine.